

READ PORT/PIPE

WRITE PORT/PIPE

R/C0

E/C1

M/C2

W/C3

C4

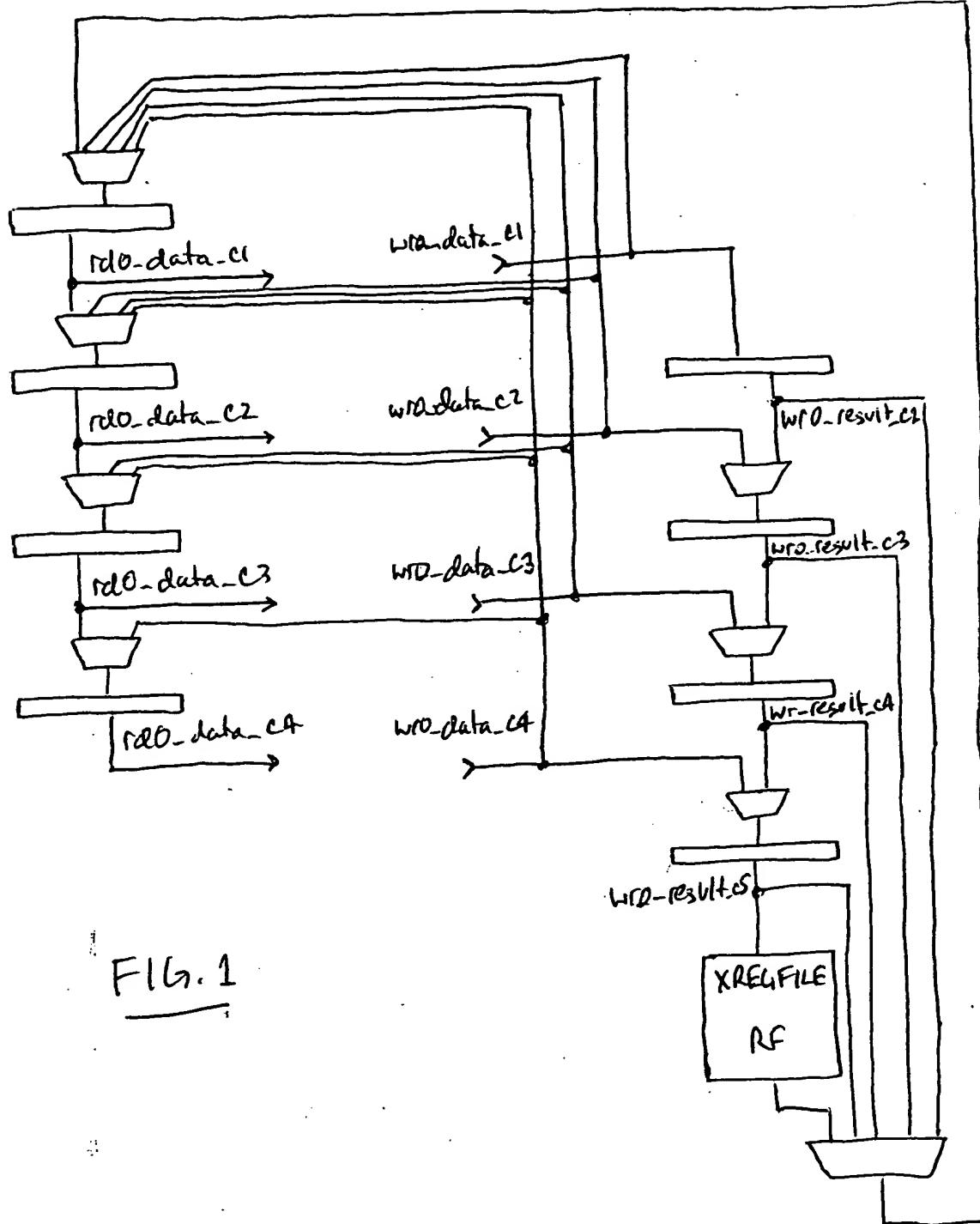


FIG. 1

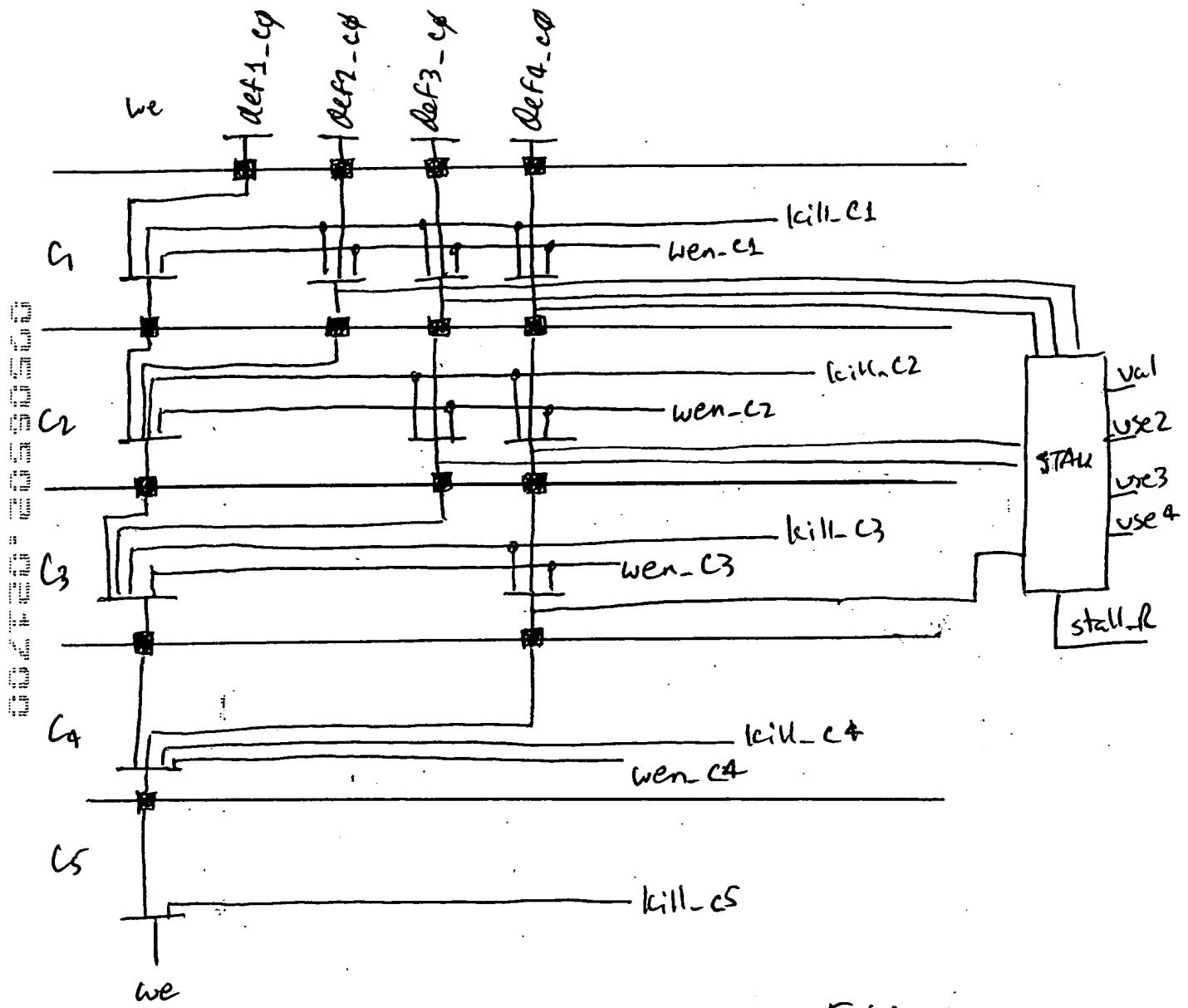
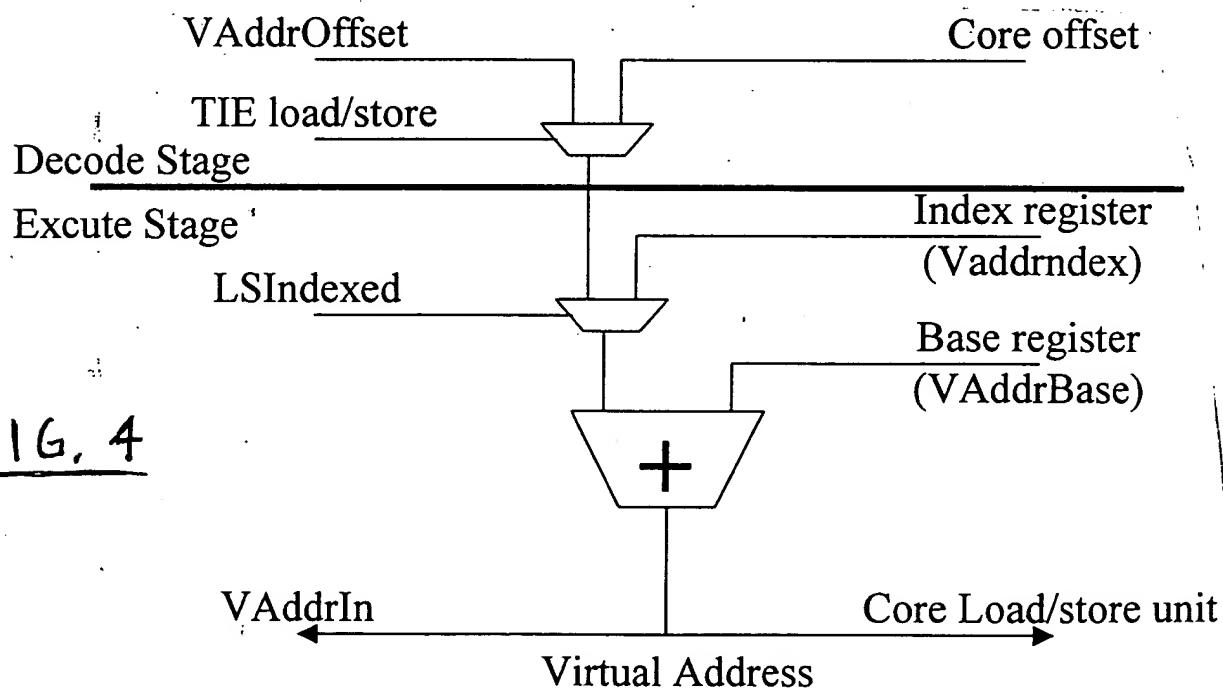
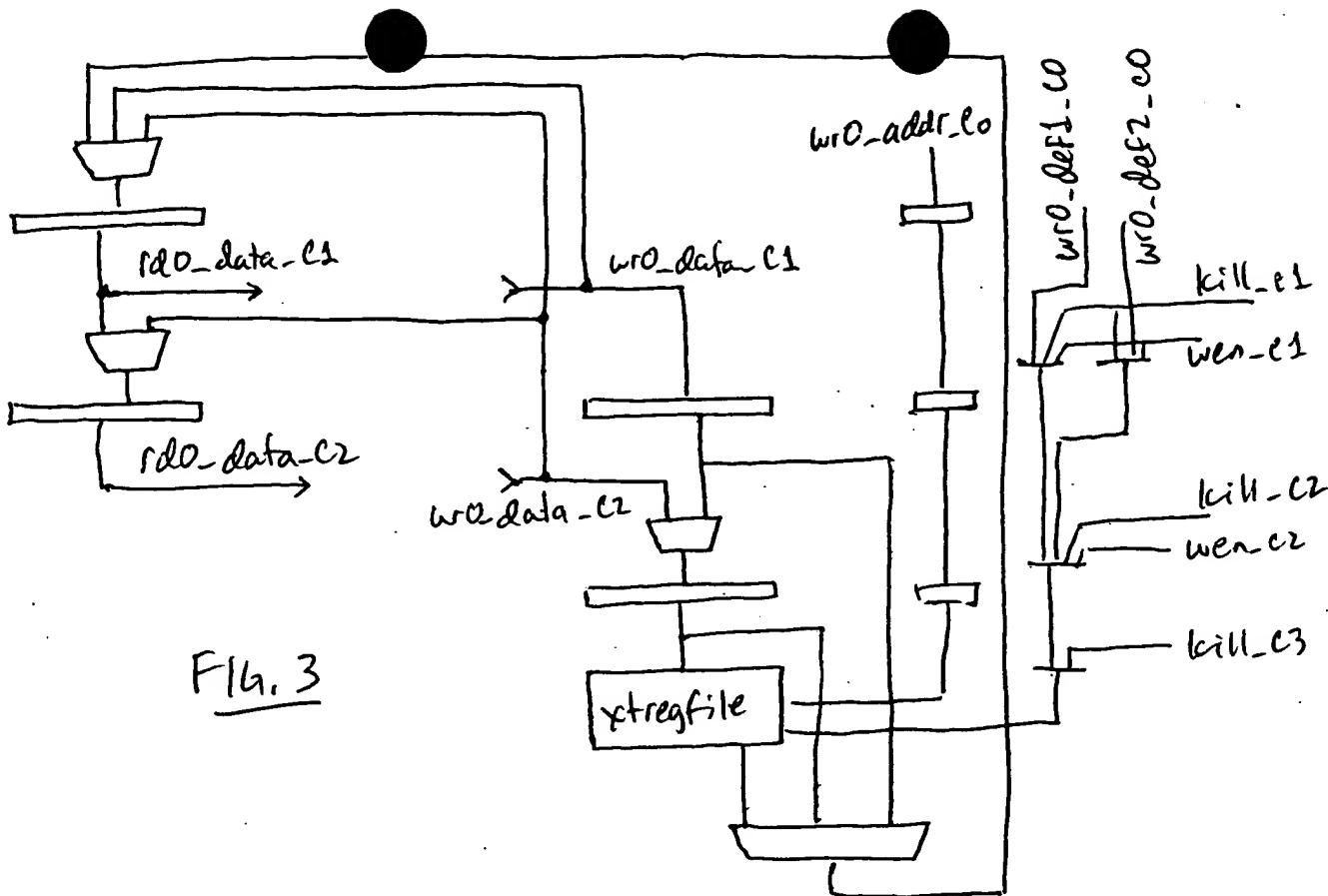


FIG. 2



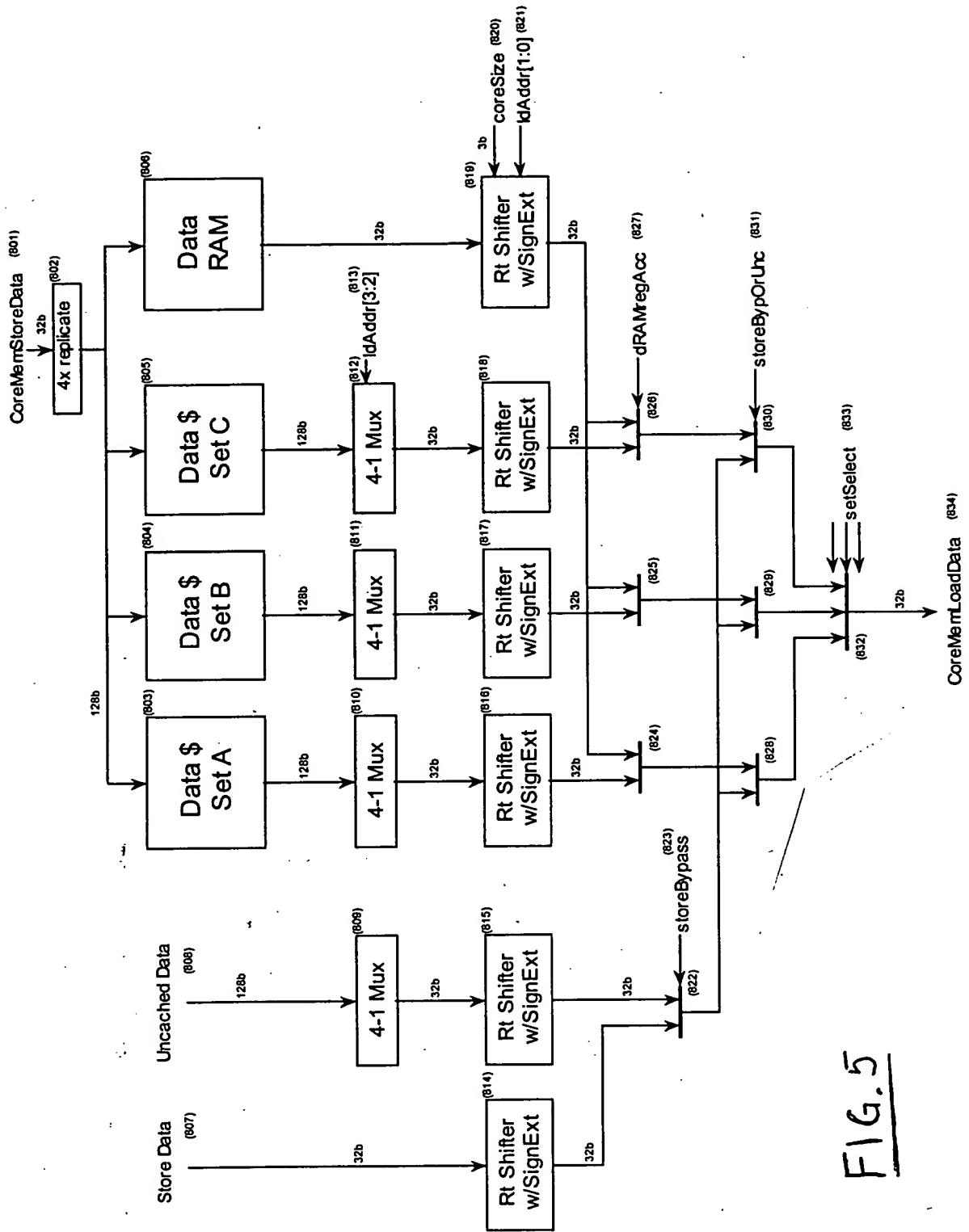


FIG. 5

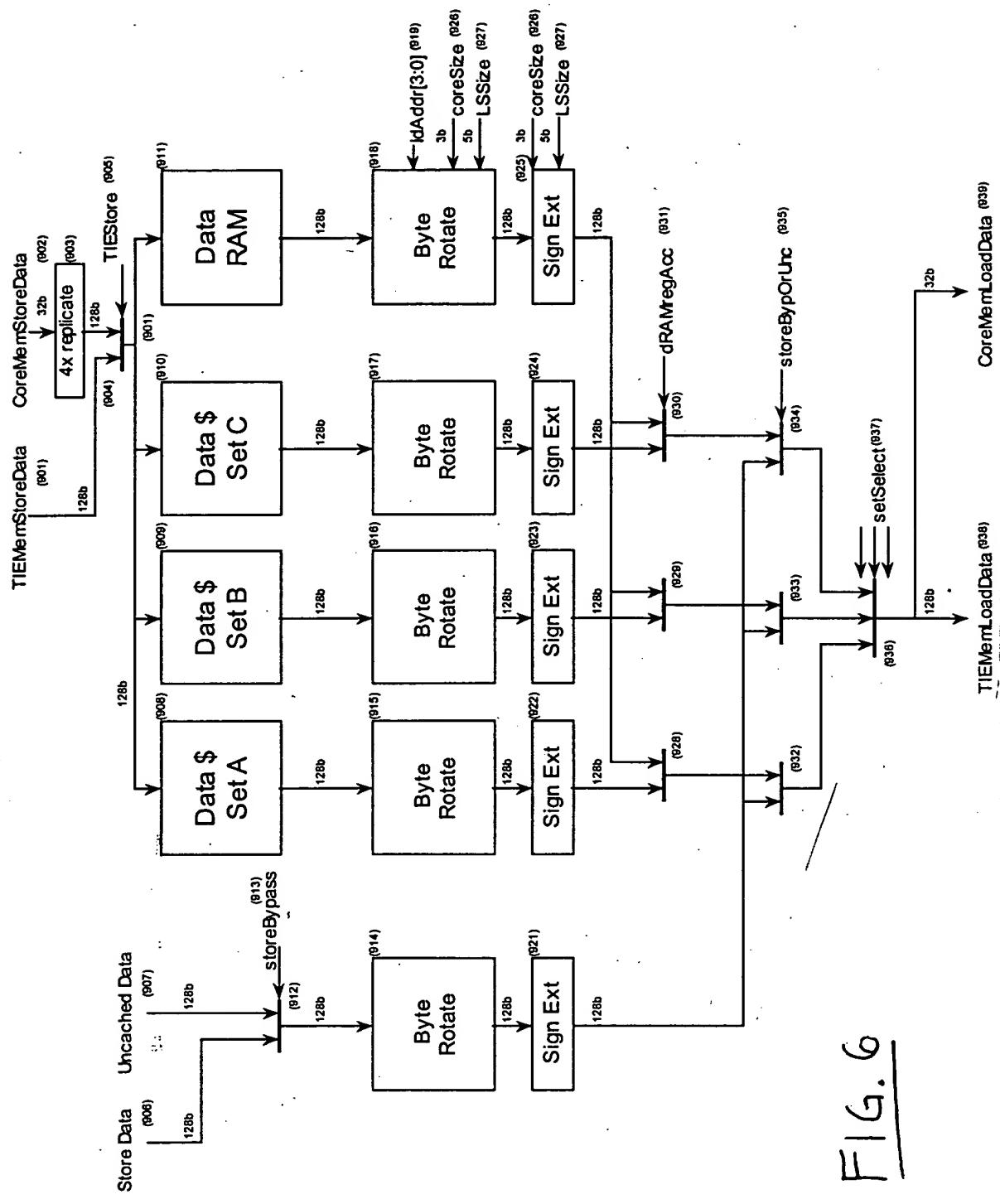


FIG. 6

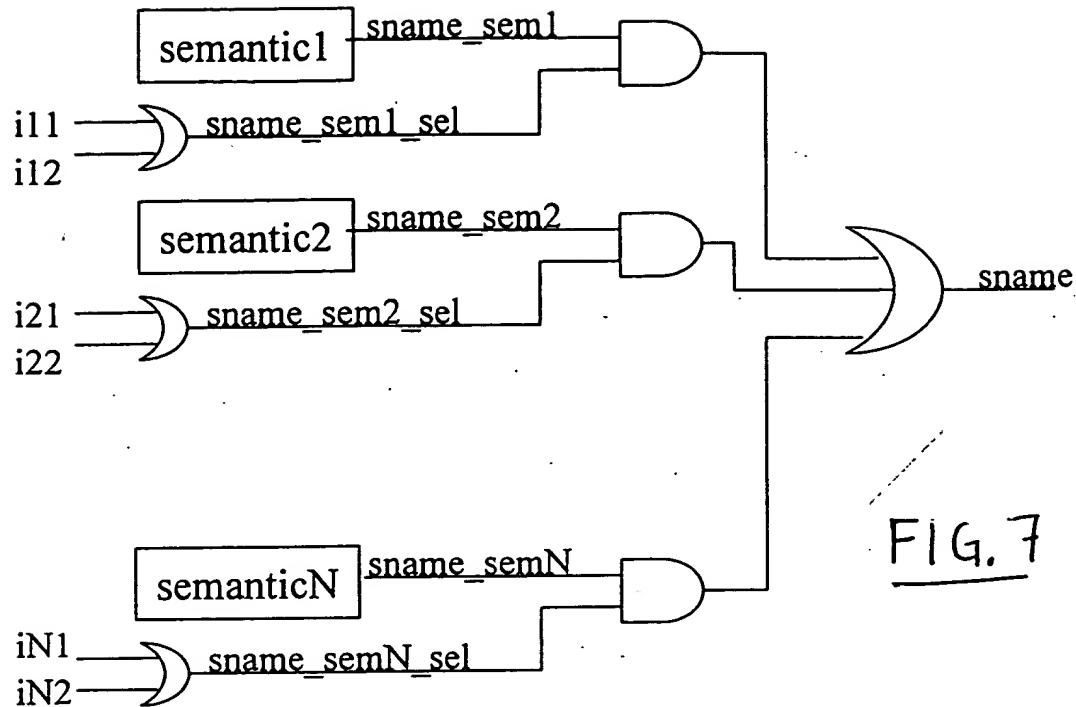


FIG. 7

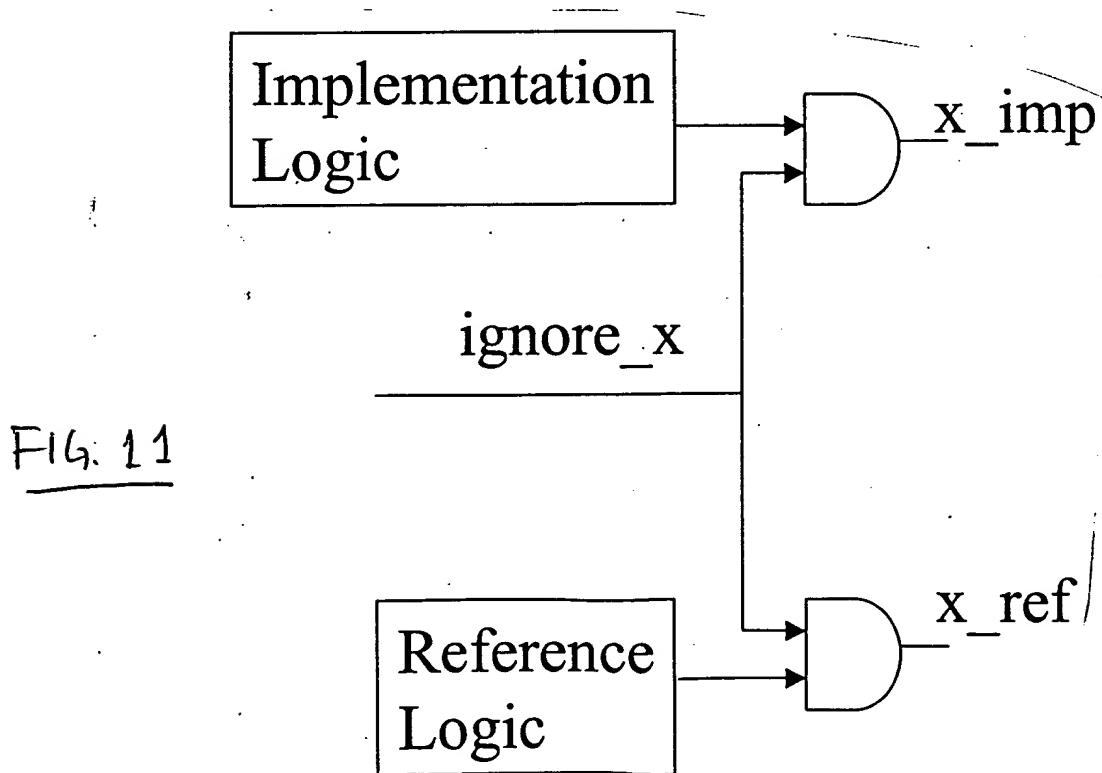


FIG. 11

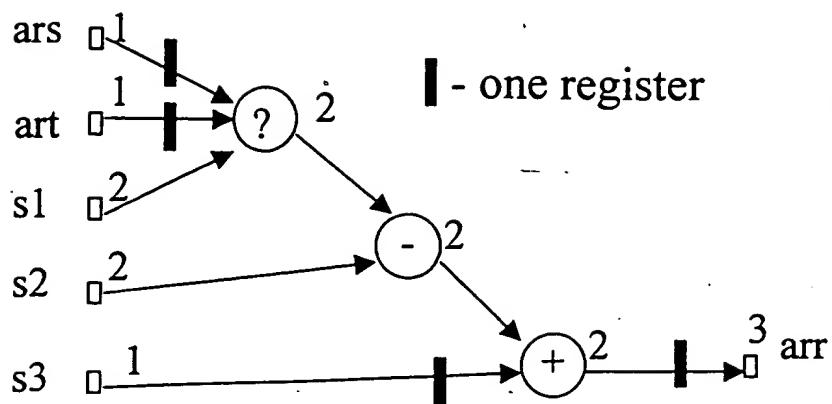


FIG. 8(a)

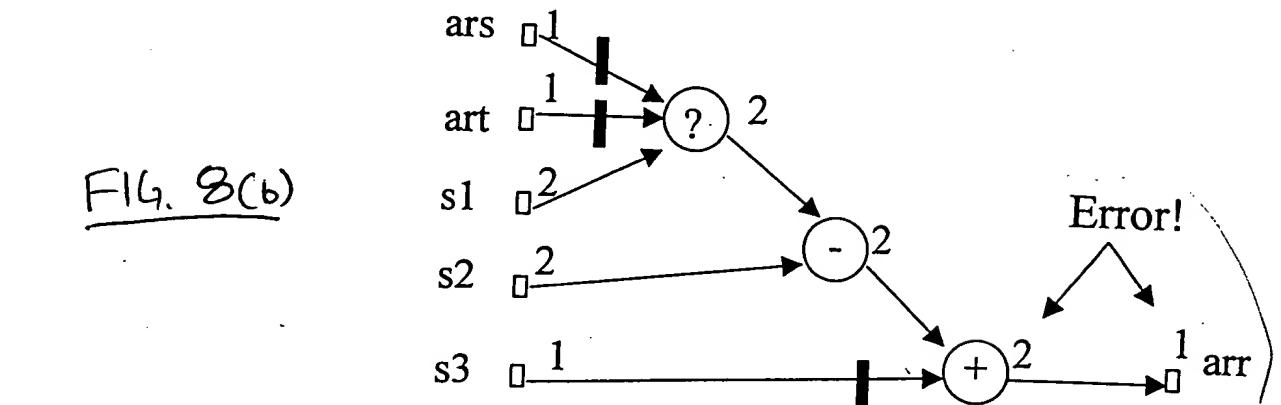


FIG. 8(b)

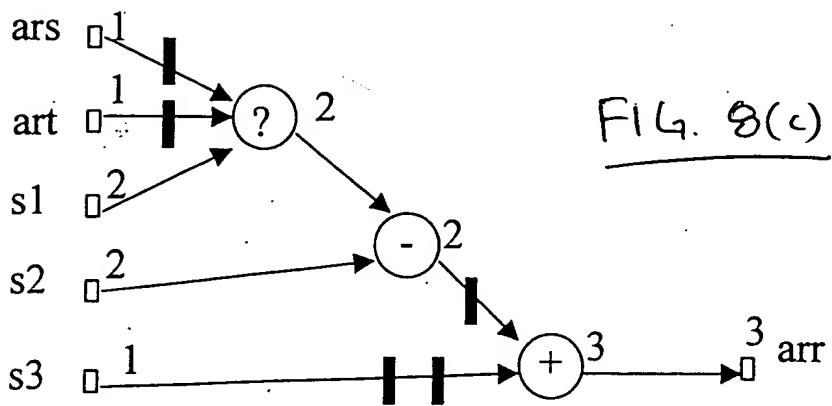


FIG. 8(c)

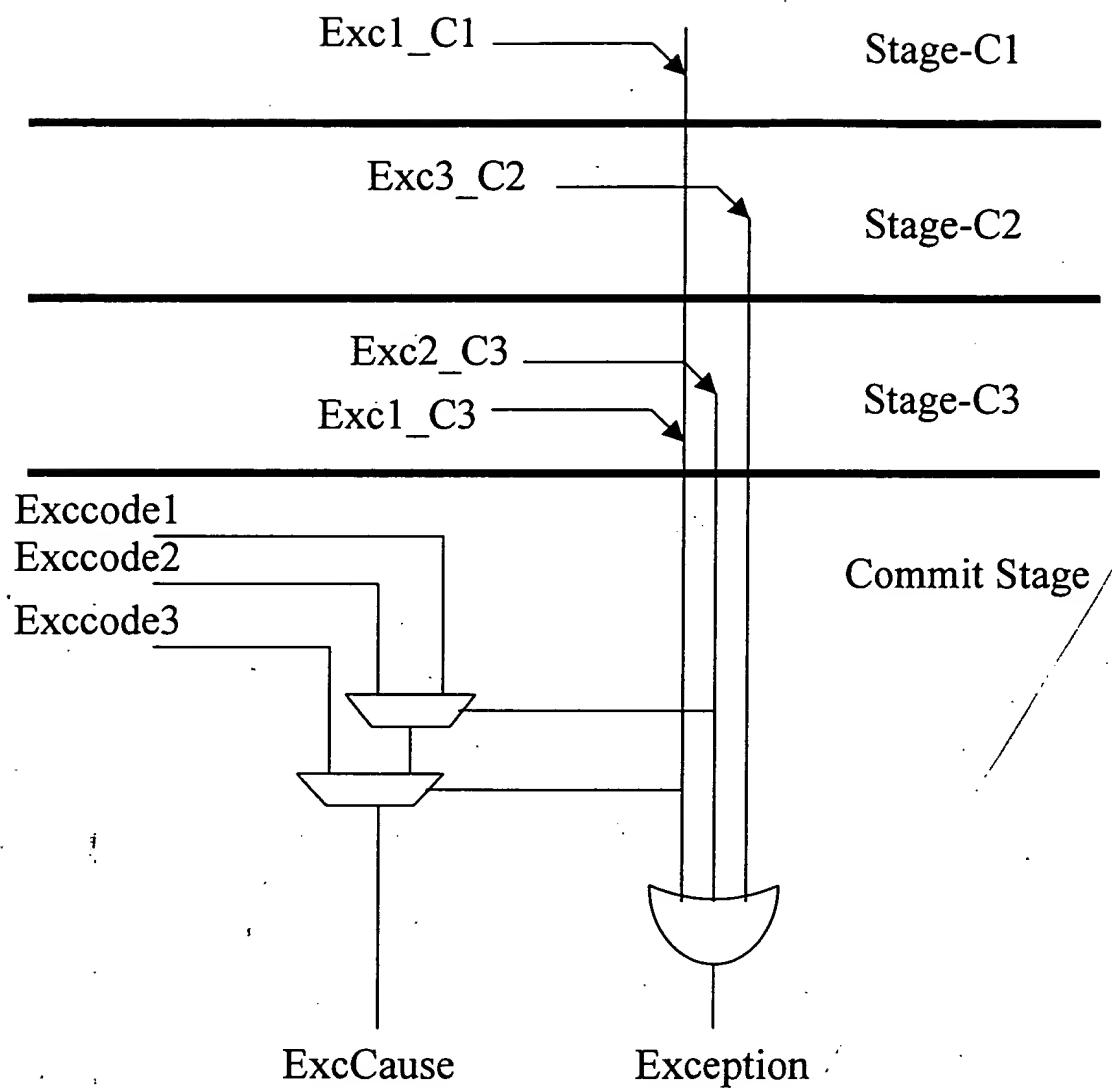


FIG. 9

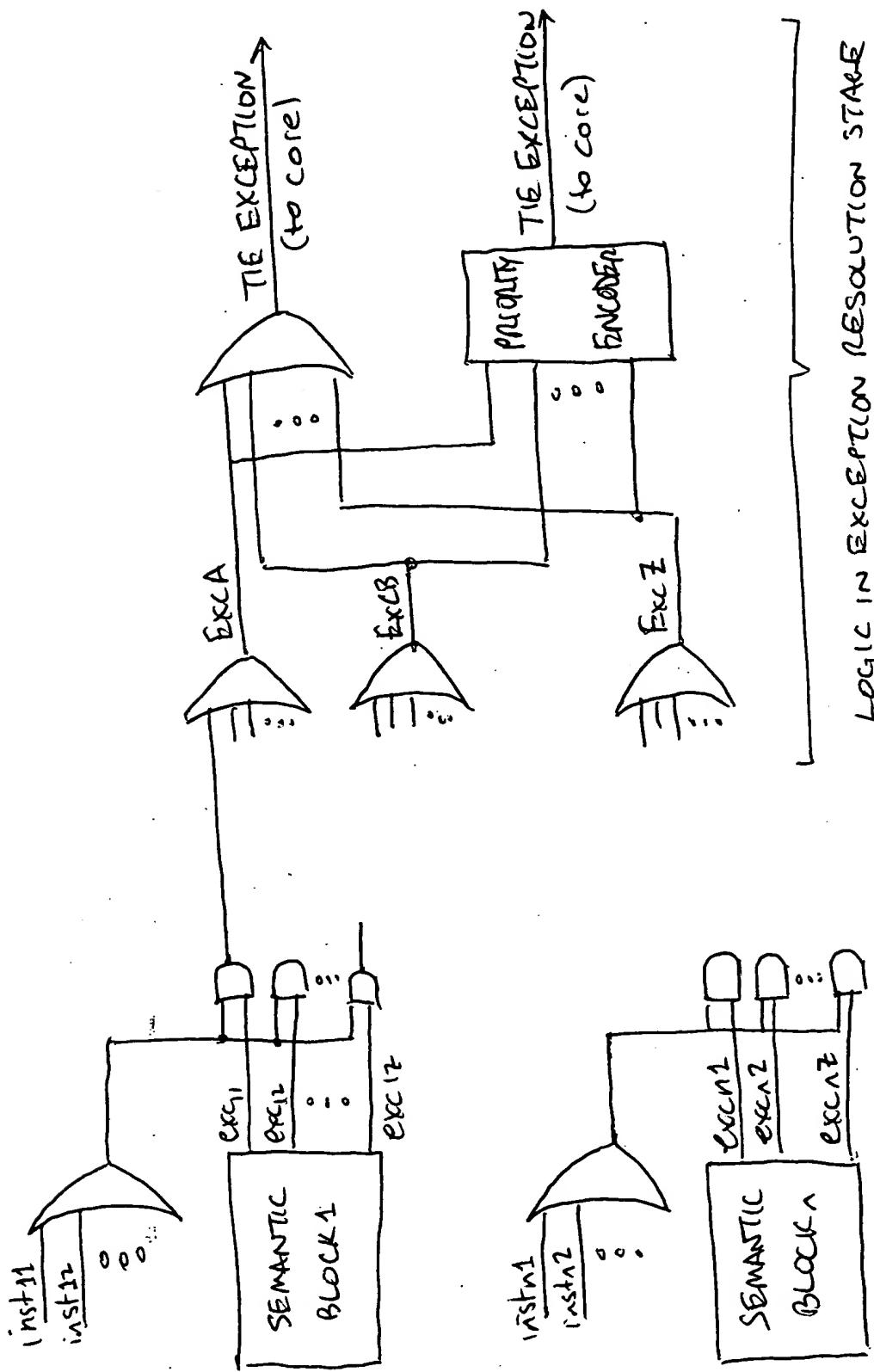


FIG. 10

MAX40**4 Parallel 40-bit Maximum****Instruction Word**

23	16 15	12 11	8 7	4 3	0
0 0 1 1 1 0 1	r	s	t	0 0 0 0	4

8 4 4 4 4

Package

Vector Integer Coprocessor

Assembler Syntax

MAX40 vr, vs, vt

Description

MAX40 calculates the 40-bit two's complement maximum value for each of the 4 elements of vector registers vs and vt. The result elements are written to vector register vr.

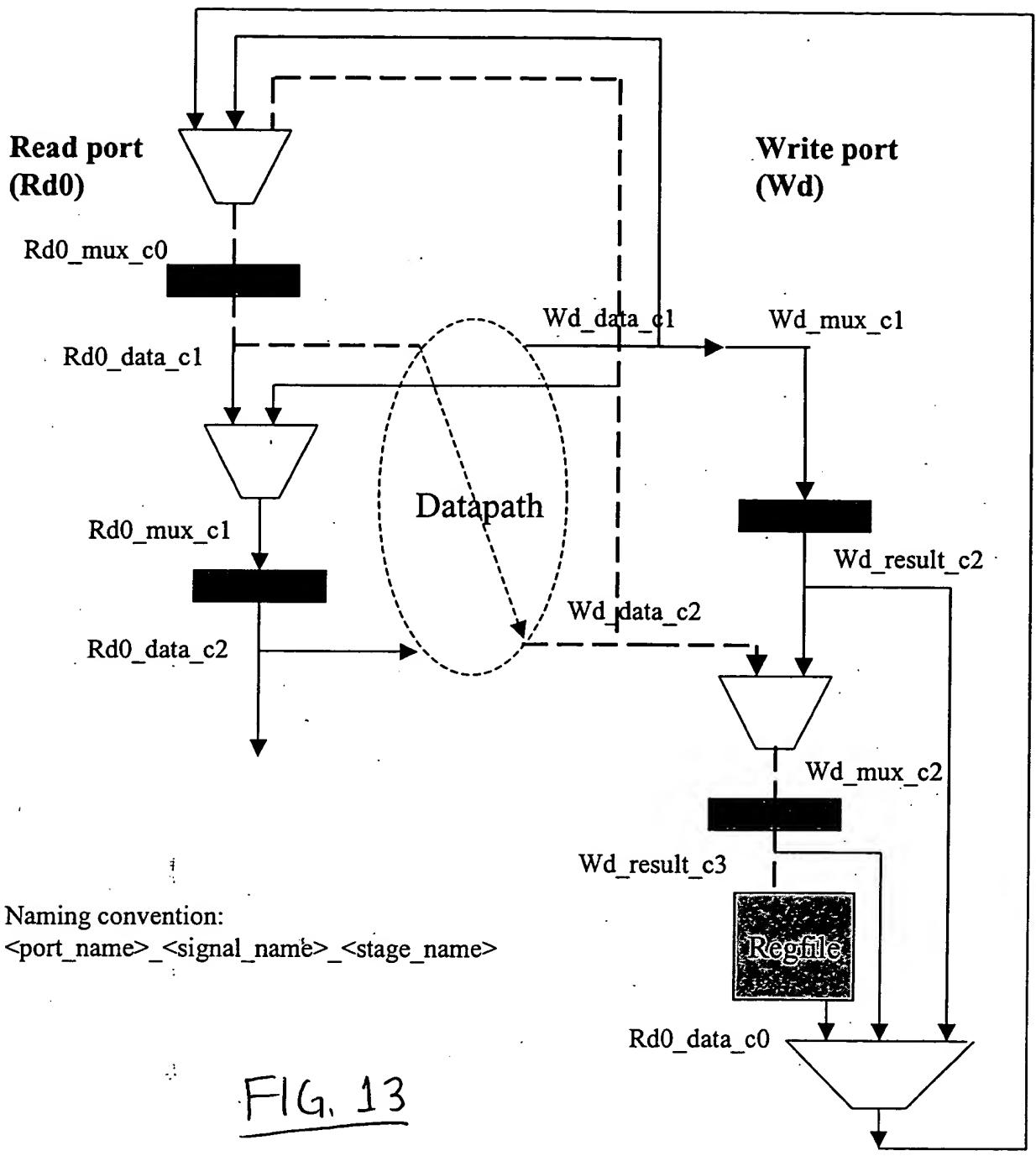
Operation

```
vr = (((~vs[159], vs[158:120]) < (~vt[159], vt[158:120])) ?  
       vt[159:120] : vs[159:120], (((~vs[119], vs[118:80]) < (~vt[119],  
       vt[118:80])) ? vt[119:80] : vs[119:80], (((~vs[79], vs[78:40]) <  
       (~vt[79], vt[78:40])) ? vt[79:40] : vs[79:40], (((~vs[39],  
       vs[38:0]) < (~vt[39], vt[38:0])) ? vt[39:0] : vs[39:0]);
```

Exceptions

None

F16.12



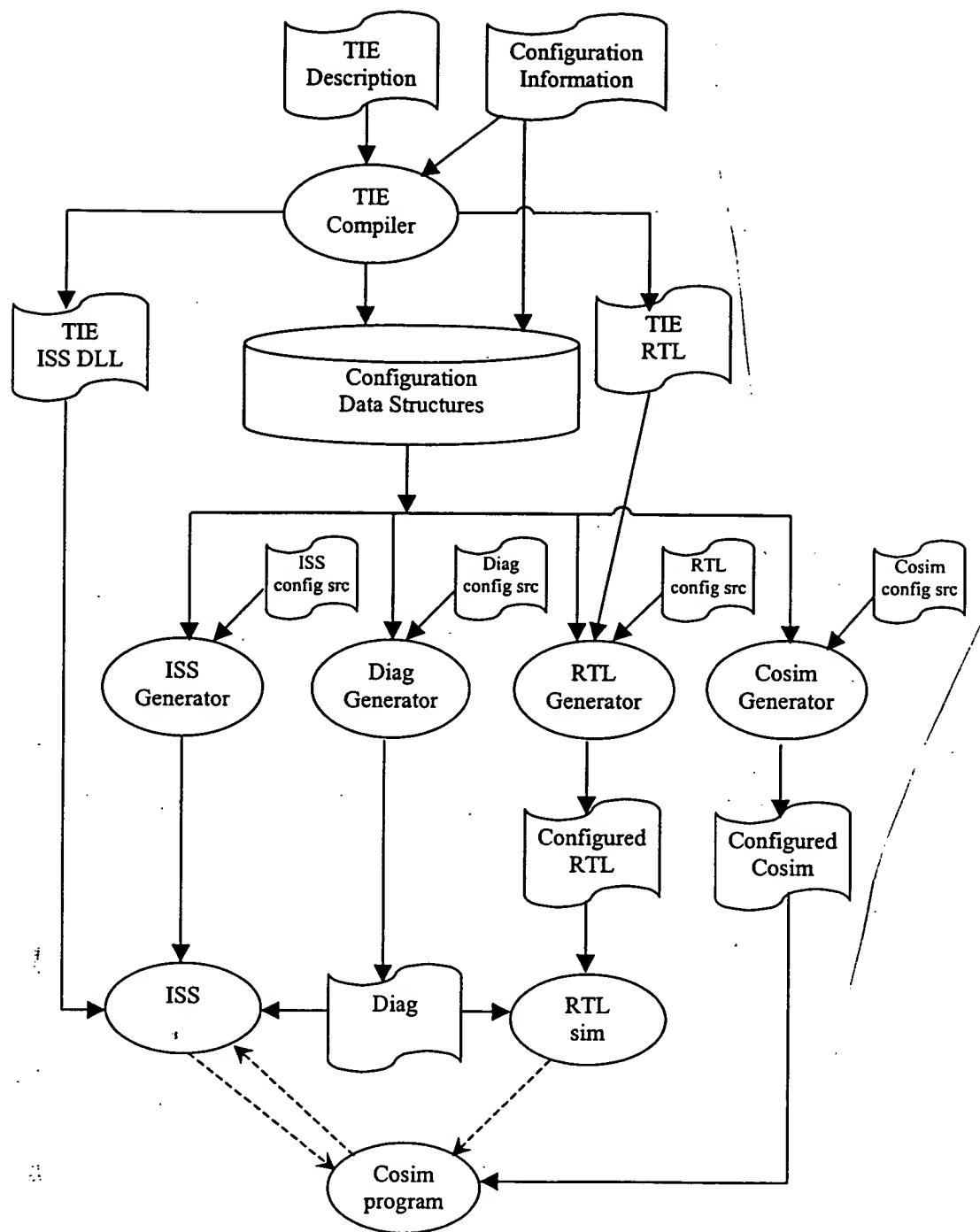


FIG. 14